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| APPLICATION NO.        | F                                       | ILING DATE                               | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|------------------------|---|--|----------------------|---------------------|------------------|--|
| 09/630,024             | 1                                       | 07/31/2000 Kevin L. Farley 2479.2013-000 |                      | 4041                |                  |  |
| 21005                  | 7590                                    | 12/06/2005                               |                      | EXA                 | MINER            |  |
| HAMILTO                | HAMILTON, BROOK, SMITH & REYNOLDS, P.C. |  |                      |                     | ORGAD, EDAN      |  |
| 530 VIRGII             | NIA ROAI                                | )  |                      |                     |                  |  |
| P.O. BOX 9             | P.O. BOX 9133                           |  |                      | ART UNIT            | PAPER NUMBER     |  |
| CONCORD, MA 01742-9133 |   |  |                      | 2684                |                  |  |

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)   |  |
|--|--|--|--|
|  | 09/630,024   | FARLEY ET AL.  |  |
| Office Action Summary  | Examiner   | Art Unit   |  |
|  | Edan Orgad   | 2684   |  |
| The MAILING DATE of this communication app<br>Period for Reply   | pears on the cover sheet with the c  | orrespondence address  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |
| Status   |  |  |  |
| <ol> <li>Responsive to communication(s) filed on 21 S</li> <li>This action is FINAL.</li> <li>Since this application is in condition for alloward closed in accordance with the practice under E</li> </ol>  | s action is non-final.  nce except for formal matters, pro   |  |  |
| Disposition of Claims  |  |  |  |
| 4) ☐ Claim(s) 1-15,18-23 and 25-31 is/are pending 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-15,18-23 and 25-31 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o   | wn from consideration.   |  |  |
| 9) The specification is objected to by the Examine   | or .   |  |  |
| 10) The drawing(s) filed on is/are: a) acc   |  | Examiner.  |  |
| Applicant may not request that any objection to the  | drawing(s) be held in abeyance. See  | e 37 CFR 1.85(a).  |  |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list   | s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).   | on No ed in this National Stage  |  |
| Attachment(s)  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 4) Interview Summary Paper No(s)/Mail Da   | (PTO-413)<br>ate.  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date   | 5) Notice of Informal P 6) Other:  | atent Application (PTO-152)  |  |

## **DETAILED ACTION**

## Response to Arguments

Applicant's arguments with respect to claims 1-15, 18-23 and 25-31 have been considered but are most in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 10-14, 18-20, and 28-31, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy et al. (6,141,347) in view of Langlet et al. (5,930,248).

Consider claim 1, Shaughnessy discloses a method of multicasting messages in a wireless network (see col. 1 lines 9-12). Shaughnessy discloses receiving at a base station processor having a plurality of wireless channels a multicast message addressed to a multicast group having one or more members (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said

plurality of multicast group members (see col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses, channels dedicated to transmitting multicast messages, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members. Langlet teaches channels dedicated to transmitting multicast messages, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and channels dedicated to transmitting multicast messages, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members, as taught by Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

Consider claim 13, Shaughnessy discloses a system for multicasting messages in a wireless network (see col. 1 lines 9-12). Shaughnessy discloses a base station processor having a plurality of wireless channels operable to transmit a wireless message; and a plurality of subscriber access units in communication with receiving at a base station processor having a plurality of wireless channels a multicast message addressed to a multicast group having one or more members (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy

discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses said base station processor is operable to receive a multicast message and simultaneously transmit said multicast message to at least one of said plurality of subscribers access units via the plurality of wireless channels (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13, see col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses one of said plurality of wireless channels dedicated to transmitting multicast messages. Langlet teaches one of said plurality of wireless channels dedicated to transmitting multicast messages (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have one of said plurality of wireless channels dedicated to transmitting multicast messages, as taught by Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

Consider claim 29, Shaughnessy discloses a computer program product having computer program code for multicasting messages in a wireless network (see col. 1 lines 9-12, col. 4 lines 62-67, and col. 5 lines 1-21, where Shaughnessy discloses a microprocessor, i.e. program product and code, that performs the method). Shaughnessy discloses a computer program code for receiving a multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels and receiving at a base station processor having a

plurality of wireless channels a multicast message addressed to a multicast group having one or more members (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses computer program code for determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses computer program code for sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses one of said wireless channels <u>dedicated to transmitting multicast messages</u>. Langlet teaches the one of said wireless channels <u>dedicated to transmitting multicast messages</u> (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have one of said wireless channels dedicated to transmitting multicast messages, as taught by Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

Consider claim 30, Shaughnessy discloses a computer data signal including computer program code for multicasting messages in a wireless network (see col. 1 lines 9-12, col. 4 lines 62-67, and col. 5 lines 1-21, where Shaughnessy discloses a microprocessor, i.e. program product and code, that performs the method). Shaughnessy discloses program code for receiving a multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels and receiving at a base station processor having a plurality of wireless channels a multicast message addressed to a multicast group having one or more members (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses program code for determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses a program code for sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses <u>channels dedicated to transmitting multicast messages</u>, the same one of said wireless channels used to send said multicast message to said plurality of multicast group members. Langlet teaches <u>channels dedicated to transmitting multicast messages</u>, the same one of said wireless channels used to send said multicast message

to said plurality of multicast group members (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have channels dedicated to transmitting multicast messages, the same one of said wireless channels used to send said multicast message to said plurality of multicast group members, as taught by Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

Consider claim 31, Shaughnessy discloses a system for multicasting messages in a wireless network (see col. 1 lines 9-12). Shaughnessy discloses a means for receiving a multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels and receiving at a base station processor having a plurality of wireless channels a multicast message addressed to a multicast group having one or more members (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses a means for determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses a means for sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses channels dedicated to transmitting multicast messages the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members. Langlet teaches channels dedicated to transmitting multicast messages the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have channels dedicated to transmitting multicast messages the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members, as taught by Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

Consider claims 2, 3, and 14, Shaughnessy discloses receiving said message at each of the plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25). Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses the same one of said wireless channels. Langlet teaches the same one of said wireless channels (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have the same one of said wireless channels used to send said

multicast message to said plurality of multicast group members, as taught by Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

Consider claims 10-12, and 18-20, Shaughnessy discloses scanning the message and parsing a group address in accordance with the group according to a protocol (see col. 1 lines 14-54, col. 3 lines 34-67, and col. 4 lines 1-18).

Consider claim 28, Shaughnessy discloses an Internet connection (see col. 3 lines 34-67).

Claims 5-9, 15, 21-23, and 26-27, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy in view of Langlet as applied to claims 1, 13, and 29-31, above, and further in view of Pan et al. (6,308,079).

Consider claims 5 and 21-23, Shaughnessy discloses the method and system, as modified by Langlet above. Shaughnessy discloses several talk-groups forming variable sets groups, where the subsets are other groups of the first or other groups (see col. 4 lines 17-42). Shaughnessy and Langlet do not specifically disclose another method of talk-groups with subsets of other groups including subsets such that some are listening groups. Pan teaches another method of talk-groups with subsets of other groups including subsets such that some are listening groups (see col. 2 lines 49-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy and Langlet, and have another method of talk-groups with subsets of other groups including subsets such that some are

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listening groups as taught by Pan, thus allowing multiple user to simultaneously broadcast, as discussed by Pan (col. 2 lines 19-25).

Consider claims 6-9, 15, 26, and 27, the above combination discloses lookup and routing tables.

Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy in view of Langlet, as applied to claims 1 above, and further in view of Raith et al. (6,385,461).

Consider claim 4 Shaughnessy, discloses the method and apparatus, as modified by Langlet above. Shaughnessy further discloses a page message sent to all the group members (see col. 8 lines 20-25). Shaughnessy and Langlet do not specifically disclose one page use for all members. Raith discloses a one page used for all group members (see col. 4 lines 25-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy and Langlet, and use one page, as taught by Raith, thus allowing a method where terminals do not loose their opportunity to join the call, as discussed by Raith (col. 2 lines 5-11).

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy in view of Langlet and Pan, as applied to claim 24, above, and further in view of Raith et al. (6,385,461).

Consider claim 25, Shaughnessy, discloses the method and apparatus, as modified by Langlet and Pan above. Shaughnessy further discloses a page message sent to all the group members (see col. 8 lines 20-25). Shaughnessy, Langlet, and Pan, do not specifically disclose

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one page use for all members. Raith discloses a one page used for all group members (see col. 4

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lines 25-35). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the invention of Shaughnessy, Langlet and Pan, and use one page,

as taught by Raith, thus allowing a method where terminals do not loose their opportunity to join

the call, as discussed by Raith (col. 2 lines 5-11).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edan Orgad whose telephone number is 571-272-7884. The

examiner can normally be reached on 8:00AM to 5:30PM with every other Friday off..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

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EDAN ORGAD
PATENT EXAMINER/TELECOMMA

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